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September 16, 2004

By Hand Delivery

Mary L. Cottrell, Secretary
Department of Telecommunications and Energy
One South Station, 2nd floor
Boston, MA 02110

Re: Bay State Gas Company, D.T.E. 04-80

Dear Ms. Cottrell:

Enclosed please find the responses of Bay State Gas Company to the following requests in the Department's First Set of Information Requests: DTE 1-2, 1-3, 1-7, 1-12 and 1-17.

Please contact me if you have any questions.

Very truly yours,

Robert L. Dewees, Jr.

RLD/tlm
Enclosures

cc: Marcella Hickey
Paul Osborne
Tom Carey
Cynthia Bradbury
James H. Keshian

BOS1417847.1

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
FIRST SET OF INFORMATION REQUESTS OF THE DEPARTMENT
D.T.E. 04-80

Date: September 16, 2004

Witness Responsible: Vincent Rea

DTE 1-2: Refer to the pre-filed testimony of Vincent Rea at 4, lines 10-12. Please list the anticipated capital requirements, by category and amount, that are intended to support the Company's public service obligations.

RESPONSE: The capital requirements will include the normal type of expenditures necessary to support the Company's public service obligations. Based on the Company's 2004 capital spending forecast, these would include items such as meter work (\$.5 million), mains added for new growth (\$6.9 million), technology (\$2.8 million), and main replacement (\$9.9 million). The Company expects 2005 capital spending levels to be similar to 2004 levels with the exception of additional funding required for accelerated replacement of non-cathodically protected (bare steel) pipe.

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Date: September 16, 2004

Witness Responsible: Vincent Rea

DTE 1-3: Refer to the pre-filed testimony of Vincent Rea at 4, lines 3-8. Please provide an illustrative example of how the interest rate for the proposed notes will be determined. For purposes of this response, use the most recently available Treasury yields and current credit spreads associated with a five-year note.

RESPONSE: Illustrative example of how the interest rate for the proposed note will be determined:

Applicable 5-year Treasury yield (1)	3.40%
Reuters Corporate Spreads for Utilities (2)	.87%
<hr/>	
Illustrative - Interest Rate for Proposed Note	4.27%
<hr/>	

- (1) From Federal Reserve Statistical Release H.15 Selected Interest Rates (Daily) – September 10, 2004
- (2) From Bonds Online – Reuters Corporate Spreads for Utilities – September 10, 2004

Abridged

Federal Reserve Statistical Release



H.15

Selected Interest Rates

Release Date: September 13, 2004

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FEDERAL RESERVE STATISTICAL RELEASE
H.15 (519)

For immediate release
September 13, 2004

SELECTED INTEREST RATES Yields in percent per annum

	*						
	2004 Sep 6	2004 Sep 7	2004 Sep 8	2004 Sep 9	2004 Sep 10	2004 Sep 10	Week Ending Sep 3 2004 Aug
Instruments							
U.S. government securities							
Treasury bills (secondary market) 3 4							
4-week		1.49	1.55	1.55	1.58	1.54	1.43 1.35
3-month		1.64	1.62	1.61	1.63	1.63	1.58 1.48
6-month		1.87	1.84	1.84	1.83	1.85	1.78 1.72
Treasury constant maturities							
Nominal 10							
1-month		1.53	1.57	1.57	1.60	1.57	1.46 1.37
3-month		1.66	1.65	1.64	1.66	1.65	1.61 1.50
6-month		1.91	1.88	1.88	1.87	1.89	1.82 1.76
1-year		2.13	2.09	2.09	2.08	2.10	2.03 2.02
2-year		2.58	2.50	2.50	2.50	2.52	2.47 2.51
3-year		2.91	2.83	2.85	2.84	2.86	2.81 2.88
5-year		3.48	3.40	3.41	3.40	3.42	3.39 3.47
7-year		3.89	3.80	3.84	3.79	3.83	3.82 3.90
10-year		4.26	4.18	4.22	4.19	4.21	4.19 4.28
20-year 11		5.03	4.96	4.99	4.97	4.99	4.98 5.07

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Reuters Corporate Spreads for Utilities

Spreads compiled using : [Download spread file](#)

Rating	1 yr	2 yr	3 yr	5 yr	7 yr	10 yr	30 yr
<i>Aaa/AAA</i>	1	3	4	6	10	15	37
<i>Aa1/AA+</i>	6	7	11	23	25	29	49
<i>Aa2/AA</i>	11	13	17	26	30	42	58
<i>Aa3/AA-</i>	16	20	22	30	38	54	77
<i>A1/A+</i>	19	25	26	43	48	69	79
<i>A2/A</i>	22	25	28	49	52	72	81
<i>A3/A-</i>	31	36	41	55	65	73	99
<i>Baa1/BBB+</i>	45	56	61	77	82	89	109
<i>Baa2/BBB</i>	58	67	75	87	93	114	126
<i>Baa3/BBB-</i>	64	83	87	95	103	126	134
<i>Ba1/BB+</i>	315	387	370	302	245	275	230
<i>Ba2/BB</i>	325	350	375	305	205	210	260
<i>Ba3/BB-</i>	305	330	350	325	220	265	320
<i>B1/B+</i>	385	425	555	460	315	375	300
<i>B2/B</i>	515	540	605	510	320	445	470
<i>B3/B-</i>	590	620	710	610	470	545	620
<i>Caa/CCC</i>	680	750	855	810	595	620	720

Note: Reuters Evaluator spreads for bullet bonds.

Other Corporate Bond Spreads

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COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

RESPONSE OF BAY STATE GAS COMPANY TO THE
FIRST SET OF INFORMATION REQUESTS OF THE DEPARTMENT
D.T.E. 04-80

Date: September 16, 2004

Witness Responsible: Vincent Rea

DTE 1-7: Refer to the pre-filed testimony of Vincent Rea at 5, lines 9-10. Please explain what is meant by the Company's statement that it will calculate the interest rate "based upon a simple linear interpolation method."

RESPONSE: The following is an explanation of what is meant by "simple linear interpolation method".

If Bay State were to decide to issue an 8-year note, neither the Federal Reserve Statistical Release or the Reuters Corporate Spreads for Utilities provide an 8-year reference rate. However, both of these reference sources provide both a 7-year reference rate and a 10-year reference rate. By using simple linear interpolation, the 8-year reference rates can be found as follows:

8-Year Treasury Note Interpolation [1]

7-Year Treasury Note Yield	3.79%
10-Year Treasury Note Yield	4.19%
Linear increment between 7-Year Treasury and 10-Year Treasury	$4.19\% - 3.79\% = .40\%$
1-Year Linear Increment	$.40\% / 3 \text{ years} = .133\%$
7-Year Treasury Note Yield	3.79%
1-Year Linear Increment	+
Interpolated 8-Year Treasury Yield	$.133\%$ 3.923%

8-Year Corporate Spread for Utilities [1]

7-Year Corporate Spread for Utilities	.93%
10-Year Corporate Spread for Utilities	1.14%

Linear Increment Between 7-Year Corporate Spread and 10-Year Corporate Spread		$1.14\% - .93\% = .21\%$
1-Year Linear Increment		$.21\% / 3 \text{ years} = .07\%$
7-Year Corporate Spread for Utilities		<u>.93%</u>
1-Year Linear Increment	+	<u>.07%</u>
Interpolated 8-Year Corporate Spread		1.00%
<hr/>		
Interpolated Interest Rate for 8-Year Note		$3.923\% + 1.00\% = 4.923\%$
<hr/>		

[1] Rates as of Friday September 10,2004

Abridged

Federal Reserve Statistical Release



H.15

Selected Interest Rates

Release Date: September 13, 2004

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FEDERAL RESERVE STATISTICAL RELEASE


H.15 (519)


For immediate release
September 13, 2004


SELECTED INTEREST RATES


Yields in percent per annum


	*						
	2004	2004	2004	2004	2004	Week Ending	2004
	Sep	Sep	Sep	Sep	Sep	Sep	Aug
Instruments	6	7	8	9	10	10	3
U.S. government securities							
Treasury bills (secondary market) 3 4							
4-week		1.49	1.55	1.55	1.58	1.54	1.43
3-month		1.64	1.62	1.61	1.63	1.63	1.58
6-month		1.87	1.84	1.84	1.83	1.85	1.78
Treasury constant maturities							
Nominal 10							
1-month		1.53	1.57	1.57	1.60	1.57	1.46
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10-year		4.26	4.18	4.22	4.19	4.21	4.19
20-year 11		5.03	4.96	4.99	4.97	4.99	4.98




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Reuters Corporate Spreads for Utilities

Spreads compiled using : Reuters Evaluators Refresh [Download spread file](#)

Rating	1 yr	2 yr	3 yr	5 yr	7 yr	10 yr	30 yr
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D.T.E. 04-80

Date: September 16, 2004

Witness Responsible: Vincent Rea

DTE 1-12: Refer to Exhibit 7 in the Company's Petition. Please provide a breakdown, by account, of the \$747,111,849 reported for gross utility plant. As part of this response, provide the acquisition premium and construction work in progress balances that were removed from the gross utility plant calculation.

RESPONSE: As of June 30, 2004, The Total Gross Utility Plant of \$747,111,849 was comprised of \$39,403,286 of Intangible Plant, \$23,113,551 of Production Plant, \$636,598,820 of Transmission & Distribution Plant, and \$47,996,192 of General Plant. Please see Attachment DTE 1-12 for further detail.

As of June 30, 2004, Bay State Gas had a \$10,389,597 Construction Work In Progress balance and a \$381,359,127 Net Acquisition Premium balance (Construction Work In Progress and Net Acquisition Premium are *not* included in the Total Gross Utility Plant amount reported above). Please see Attachment DTE 1-12 for further detail.

**Gross Utility Plant Breakdown, Construction Work In Progress, and Plant Acquisition Premium
As of June 30, 2004**

GROSS UTILITY PLANT

Account	Description	As of June 30, 2004
Intangible Plant		
301	Organization	\$ 4,432,919
303	Miscellaneous Intangible Plant	34,970,367
	Total Intangible Plant	39,403,286
Production Plant		
304	Land and Land Rights	412,592
305	Structures and Improvements	2,360,315
311	Liquefied Petroleum Gas Equipment	4,286,444
320	Other Equipment	819,115
321	LNG Equipment	15,235,085
	Total Production Plant	23,113,551
Transmission & Distribution Plant		
365	Land and Land Rights	298,092
366	Structures and Improvements	2,108,612
367	Mains	297,122,901
368	Compressor Station Equipment	327,265
369	Measuring and Regulating Station Equipment	11,827,323
379	Other Equipment	510,252
380	Services	219,375,324
381	Meters	24,658,961
382	Meter Installations	43,795,348
383	House Regulators	13,565,817
386	Other Property on Customers Premise	21,301,442
387	Other Equipment	1,707,483
	Total Transmission & Distribution Plant	636,598,820
General Plant		
389	Land and Land Rights	172,321
390	Structures and Improvements	7,026,832
391	Office furniture and Equipment	11,200,693
392	Transportation Equipment	2,358,533
393	Stores Equipment	50,473
394	Tools, Shop, and Garage Equipment	1,765,711
396	Power Operated Equipment	406,425
397	Communications Equipment	24,989,985
398	Miscellaneous Equipment	25,219
	Total General Plant	47,996,192
Total Gross Utility Plant		\$ 747,111,849

CONSTRUCTION WORK IN PROGRESS

As of June 30, 2004

Construction Work in Progress **\$ 10,389,597**

PLANT ACQUISITION PREMIUM

As of June 30, 2004

Gross Plant Acquisition Adjustment	\$ 443,450,715
Accumulated Amortization of Plant Acquisition Adjustment	(62,091,588)
Net Acquisition Premium	\$ 381,359,127

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Date: September 15, 2004

Witness Responsible: Vincent Rea

DTE 1-17: Please provide the most recently available Form 10-Q for Nisource.

RESPONSE: Please see Attachment DTE 1-17.